

# BEWARE OF THE EXISTENCE OF A BIG BATH WITH ASSET IMPAIRMENT AFTER PANDEMIC COVID-19

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## BEWARE OF THE EXISTENCE OF A BIG BATH WITH ASSET IMPAIRMENT AFTER PANDEMIC COVID-19

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**ABSTRACT:** The objective of this study is to investigate the relationship between a big bath accounting and asset impairment. The sample constituted of 231 firm-years observation from 33 mining companies that listed in Indonesia Stock Exchange during the 2012 to 2018 period. Logistic Regression has been used to analyze a big bath accounting on assets impairment. The results of this study found evidence that companies that tend to do a big bath accounting will recognize a loss of asset value. A big bath accounting is done because managers assume that investors will give the same response when the company suffered large losses or small losses. The manager acknowledges the costs of future periods and current period losses when unfortunate unavoidable circumstances in the current period. It will consequently make a profit higher than expected in the next year. In the next period, the company's performance will look better so that managers can maximize utility in the form of compensation for the targets that have been achieved.

**Keywords:** Assets impairment, a big bath accounting, earnings management, loss.

### INTRODUCTION

Every company requires capital to run and achieve its objectives. The owners of the company hire managers to manage the company's capital and its assets to achieve the goals and increase the wealth of the company owner. Managers are responsible for optimizing the owner's return and they will be compensated according to the contract (Jensen and Mekling, 1976).

The COVID-19 pandemic that occurred throughout the world, which began at the end of 2019 gave rise to many changes in the behavior of the industrial world. Almost the entire industrial sector was affected by the pandemic. Many sectors have decreased or slowed growth. Some other sectors grow well. Pandemic has caused some companies to close their operations, factories reduce and manage work schedules, decrease the amount of production, decrease the use of assets that trigger a decline in the value of assets. The hospitality, transportation, manufacturing, and mining industries are the sectors that have declined due to the pandemic.

A sharp change in the company's financial condition raises a variety of potential changes in management behavior. Agency theory suggests that management is the party that controls information compared to other parties so that there is a possibility that financial information presented is of efficiency and opportunistic nature.

In pandemic or natural disaster, accounting also has affected (Stenheim and Madsen, 2016; Cheng *et al.*, 2019; Ozili, 2020). Managers who have moral hazard intentions, the condition of this force Majeure can be utilized for opportunistic purposes. Management can ride a pandemic by accounting engineering. They can use earnings management techniques by riding COVID-19.

One possibility of earnings management that can be done is taking a big bath (Cheng *et al.*, 2019). A big bath took by riding on impairment assets. One possibility of earnings management that can be done is taking a big bath.

Managers will have more internal information and prospects compared to the owners, this condition called information asymmetry (Rossi, 2014; Hope and Wang, 2018). Information asymmetry provides an opportunity for managers to use the information they know as a tool to manipulate financial statements to maximize their prosperity. Problems that arise from a conflict of interest between managers and owners of companies is called the agency problem.

In management with moral hazard intentions, the condition of this force Majeure can be utilized for opportunistic purposes. Earnings management techniques can be done by riding COVID-19. Managers do earnings management by using a big bath accounting. A big bath accounting will make the profit does not match the conditions of economic reality. The profit represents a worse performance when the company incurs losses. This makes the next period's earnings higher than expected after the company incurs a large loss in the current period (Gonçalves *et al.*, 2019).

The owners of the company use profitability as a reference for investment in a company listed on the stock exchange (Grace and Ambrose, 2013). Prior research (Karlsson and Reimbert, 2016; Hope and Wang, 2018; Ayedh, Fatima and Mohammad, 2019) shows when a company performance is below the desired level, management would prefer to adopt impairment approach that initiates the recognition of impairment loss to restart future performance.

Firm size can determine the level of ease in obtaining funds from the capital market. The capital market has uncertain economic value. This condition makes manager worries and does various efforts to be opportunistic desires remain implemented, one alternative is using impairment loss. According to (Dudycz and Prażników, 2020) impairment occurs as a result of changes in market conditions indicating the value of the recoverable assets is less than the value of the book, and if the assets owned are greater then it will tend to decrease in value.

IAS 36 regulates asset testing that conducted periodically using an impairment test to estimate the recoverable amount of an asset (Hassine and Jilani, 2017). The recognition of an impairment loss provides an opportunity for managers to use accounting options. Accounting options are a chance for opportunistic management to maximize earnings management by looking for gaps in IAS 36 but still complying with applicable standards.

Research conducted by the authors is a replication of research Co and Rodiel who found that assets impairment used to gain earnings management by doing income smoothing and a big bath accounting (Abrigo and C. Ferrer, 2016). Siggelkow and Zuelch (2010) and Athanasakou *et al.* (2010) show different empirical evidence. Managers no longer perform earnings management in the form of a big bath accounting because of management concern over the consequences if they do a big bath accounting (Siggelkow and Zülch, 2013; Athanasakou and Hussainey, 2014). Differences in the results of previous research led researchers to investigate whether a big bath accounting affects asset impairment. Therefore, the authors would like to investigate the influence of a big bath accounting against the loss of value of mining companies listed in the Indonesia Stock Exchange 2012-2018.

## **THEORETICAL FRAMEWORK AND HYPOTHESIS**

### **Agency Theory**

Agency theory solves potential lack of harmonious goals, preferences, and actions between managers and shareholders, companies should tie manager compensation to shareholders through ownership or compensation. This includes providing stock options and bonuses to managers that match with the company's stock price (Rossi, 2014; Wiyadi *et al.*, 2015; Devie, 2017).

Titik and Putri provide empirical evidence, as a result of strong financial harmonization between CEO and shareholder, the CEO makes decisions to increase the company's net profit or market value of its shares (Titik and Putri, 2014). Thus, management compensation provides a very strong motivation for CEOs and other top management to manipulate earnings, to improve their financial statement.

### **Positive Accounting Theory**

Positive accounting theory assumes that managers behave opportunistically in their interests or to increase their wealth (Watts and Zimmerman, 1990). Therefore, Watts and Zimmerman (1990) explain that accounting choices are made in terms of individual goals and effects of accounting methods in achieving those objectives. Positive accounting has three hypotheses: bonus planning, debt management, and a political cost hypothesis. While the debt agreement hypothesis explains that the higher the firm's debt to equity ratio, the more likely it is managers will use accounting methods that will increase revenues and prevent companies from breaking any debt covenants. Finally, the political cost hypothesis suggests that large firms tend to recognize more on impairment rather than diminish their net profits and avoid "public eye."

### **A Big Bath Accounting**

There are several kinds of earnings management techniques, they are a big bath, income minimization, income maximization, and income smoothing (Scott, 2012). A big bath technique recognizes costs in future periods and current period losses when adverse unpredictable conditions are inevitable in the current period. Consequently, management will do a "self-cleaning" by charging upcoming cost estimates and doing "clear the decks". A big bath makes the earnings of the next period will be higher than it should be.

According to Ayedh et al. (2019) and Hope and Wang (2018), big bath charges happen when the company earns very low profits or negative, the company will charge more expenses in that year so that profit is getting smaller. The goal is to reduce the burden in the future. Earnings management model is done because investors will have the same response when the company suffered large losses or small losses.

Jordan and Clark explain that companies often make earnings management in the form of a big bath accounting to recognize the accumulated impairment loss (Jordan and Clark, 2004). Cheng and Warfield found evidence that impairment decisions are used by managers with high equity incentives to increase the value of their shares (Cheng and Warfield, 2005). Abrigo and Ferrer (Abrigo and C. Ferrer, 2016) found different results from the Jordan and Clark research, but in line with results of another research (Laskaridou and Vazakidis, 2013; Siggelkow and Zülch, 2013; Laskaridou, Athanasios and Stergios, 2014). Managers no longer perform earnings management in the form of a big bath accounting management awareness of the consequences if they do a big bath accounting. If managers do a big bath accounting it will make the public view it become bad (Abrigo and C. Ferrer, 2016). Companies that perform a big bath accounting are required to restate the wrong financial report by the Securities and Exchange Commission.

### **Asset Impairment**

Impairment is a condition where there is objective evidence of loss events as a result of one or more events occurs after the initial recognition of credit, and such loss events have an impact on the estimated future cash flows of a financial asset or group of financial assets that can be estimated reliably (Laskaridou, Athanasios and Stergios, 2014).

Any impairment loss of revalued fixed asset is treated as a decrease in revaluation,



- a. Recognized in other comprehensive income, as long as the impairment loss does not exceed the amount of the revaluation surplus for the same asset;
- b. Impairment loss on revalued assets reduces the revaluation surplus for the asset (Andersson, 2014).

Recognition of impairment loss occurs if the asset's recoverable amount is less than its carrying amount, the asset's carrying amount is lowered to its recoverable amount (Andersson, 2014). The decrease is an impairment loss. An impairment loss is recognized immediately in the statement of income unless the asset is presented at a revalued amount following others. Any impairment loss of the revalued asset is treated as a decrease in revaluation then it is recognized in other comprehensive income, as long as the impairment loss does not exceed the amount of the revaluation surplus for the same asset and the impairment loss on the revaluation asset reduces the revaluation surplus for the asset.

### **Hypothesis Development**

Agency theory said that there is a separation of functions between ownership (investor) and management. Separation of functions in agency theory has a negative side that is the flexibility of management to maximize profits that can lead to the process of maximizing the interests of managers with the costs assigned to the owner of the company (Duru and Alexandros Tsitinidis, 2013). According to Jensen and Meckling (1976), information asymmetry between company owners and managers provides an opportunity for managers to act opportunistically for personal earnings. An approach used by managers to maximize personal earning is doing earnings management. One of the earnings management techniques is a big bath accounting. This technique recognizes the costs of future periods and current period losses when unfortunate circumstances are happening in the current period. The consequence is earnings in the future period will be higher than they should be. The profit management model is done because investors will give the same response when the company suffered large losses or small losses.

Kirchenheiter and Mohammad (2001) explain that companies were often done earnings management in the form of a big bath accounting to recognize the accumulated impairment loss of assets. Cheng and Warfield (2005) found evidence that impairment decisions are used by managers with high equity incentives to increase the value of their shares.

A big bath accounting is done because managers assume that investors will give the same response when the company suffered large losses or small losses. The manager recognizes the costs of future periods and current period losses when the company meets unfortunate circumstances in the current period. Consequently, the profit in the next period will higher than expected. When a company gets a low profit or losses, the company will charge more expenses by recognizing an impairment loss to reduce future expenses so that the financial statements of the company in the next period will look better. Therefore, the hypothesis formulated is as follows:

H<sub>1</sub>: A big bath accounting has a positive effect on asset impairment loss.

## **METHODOLOGY**

### **Research Design**

The research design that will be used is quantitative research based on the mining company's financial report listed on the Indonesia Stock Exchange year 2012-2018. The sample selected using purposive sampling with criteria as follows:

- 1) Companies must be registered with the Indonesia Stock Exchange and not delisting in 2012-2018;
- 2) The company publishes audited financial statements for 2012-2018;
- 3) The financial statements are denominated in US dollars and Rupiah;
- 4) The company provides complete annual financial reporting that has the end of the financial year as of December 31, 2012-2018;
- 5) The variables studied are fully available in the financial statements of 2012-2018.

### Types and Data Sources

The data used in this study is secondary data taken from the financial statements and independent auditors report of mining sector companies. There is a 231 firms-years observation. The data is obtained from the website [www.idx.co.id](http://www.idx.co.id).

### Operational Variables

#### Dependent Variables (Y)

The dependent variable is asset impairment (IM). Asset impairment is measured by variable dummy based on disclosure data of asset impairment in the company's financial statement. Logit models are often used in data classification data. This study follows Abrigo and C. Ferrer (2016) and Laskaridou et al. (2014) that use the dummy variable model. Companies that not recognize asset impairment given the number 0 and companies that recognize the asset impairment are given the number 1.

#### Independent Variable (X)

The independent variable used in this study is <sup>1</sup>big bath accounting. According to Siggelkow and Zuelch (2010), a big bath accounting is measured quantitatively by the formula:

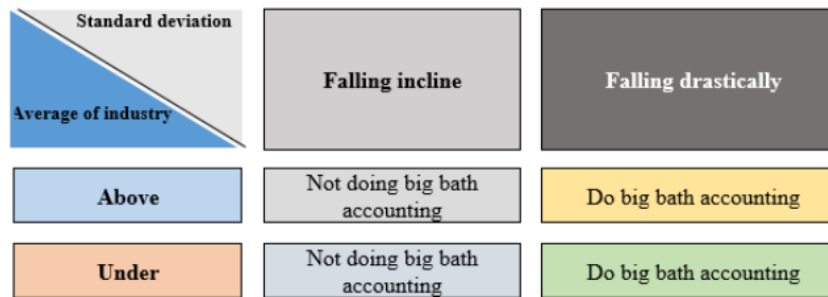
$$A \text{ big bath} = \frac{EBITDA}{Total \ Asset}$$

The ratio of a <sup>1</sup>big bath according to Siggelkow and Zuelch (2010) has several weaknesses:

- a. The ratio of a big bath only shows the number of big bath companies each year, so it can not show clearly which company doing a big bath accounting.
- b. The big bath ratio does not indicate when the year companies do a big bath accounting.
- c. The ratio of a big bath can not distinguish the company that experienced the actual loss and the company that doing a big bath accounting.

Based on those weaknesses, this study uses cut-off to determine whether a company is likely or not to do a big bath accounting. The cut-offs that used are the industry average each year and the company's standard deviation. The industry average cut-off each year indicates whether the company recognizes lower profits or lower losses than other companies in the same field. Besides, the ratio of a big bath of each company is illustrated with graphs to analyze the lowest point (lowest standard deviation) of a company to indicate a big bath accounting.

Below are criteria of companies that doing or not doing a big bath accounting:



**Figure 1.**  
**Criteria of Companies that Tend to Do A big bath Accounting**

Based on the company criteria that tend to do a big bath accounting, the author then categorizes companies that tend to do or not a big bath accounting into the dummy variable as follows:

0	: Companies didnt't tend to do big bath accounting.
1	: Companies tend to do big bath accounting

### Control Variables

The control variable is an independent variable whose effect on the criterion variable is controlled by the researcher by making the effect neutral. The control variables used in this study are:

#### 1) Profitability

This study uses return on equity as a profitability proxy that affects the impairment loss. This is based on Laskaridou *et al.* (2014).

$$ROE = \frac{\text{Net Income}}{\text{Total equity}} \times 100\%$$

#### 2) Firm size

Measurement of firm size refers to Abrigo and C. Ferrer (2016) that using total assets.

### Data Analysis Method

The logistic regression model using the dependent variable model which is also dichotomous and using a value of 1 or 0, this is used in situations where the dependent variable has the possibility of response "doing impairment" or "not doing impairment", in this study the likelihood of response is 1 = doing impairment and 0 = not doing impairment. Independent variables are a big bath accounting, and control variables are profitability that proxied with return on equity and firm size proxied by total assets. Logistic regression models do not require classical assumptions on their independent variables (Ghozali, 2011).

### General Equation of Logistic Regression

The hypothesis in this study was tested by using logistic regression analysis because the dependent variable was measured using the dummy variable, so the researcher chose to use

this kind of method to investigate the influence of the independent variable that is a big bath accounting. Logistic regression is a regression used to test whether the probability of occurrence of a dependent variable can be predicted with an independent variable. A logistic regression model that used for this study is as follows:

$$L_{IM} = \ln \left( \frac{p_1}{(1-p_1)} \right) = \alpha + \beta_1 BB + \beta_2 P_{profit} + \beta_3 Size + e$$

## A. RESULT AND DISCUSSION

### Descriptive Statistical Analysis

Based on the results of descriptive statistical analysis, there is a 231 firm-year observation from 33 companies from 2012 to 2018. 231 firm-year observation has complete data for research purposes. Here is an explanation of the data description of all the variables used in the research model using descriptive statistical analysis.

**Table 1.**  
**Results of Descriptive Statistics Analysis**

Variables	Minimum	Maximum	Mean	Standard Deviation	Varian
A big bath Accounting	0.00	1.00	0.4061	0.49259	0.243
Profitability	-2.18	4.57	0.0796	0.58422	0.341
Firm size	6.66	10.09	8.5094	0.40571	0.434
Impairment Loss	0.00	1.00	0.7939	0.4540	0.231

Source: Secondary data processed, 2020

The recognition of impairment loss represents a minimum value of 0 and a maximum value of 1. There is a 20.8% observation that did not recognize the impairment loss of assets during 2012-2018. There is 79.2% observation that recognizes impairment loss of assets during 2012-2018. If the average of all samples is taken, the asset impairment losses incurred by the company are 0.792 or 79.2%, which means that the average recognition of impairment loss is near the maximum value. So it can be concluded, that the company's awareness to recognize impairment loss of assets is high. The standard deviation of 0.40571 shows the variations contained in the index. The standard deviation value in this study is smaller than the mean value which means that the research data on the recognition of impairment loss still less varied during the research period.

There is 59,3% observation that does not perform a big bath accounting during 2012-2018. There is a 40.7% observation that tends to perform a big bath accounting during the year 2012-2018. If the average of all samples is taken, companies that tend to do a big bath accounting are 0.407 or 40.67% which means that the average firms that tend to do a big bath



accounting are far from the maximum. So it can be concluded, that companies that tend to do a big bath accounting are low. The standard deviation of 0.49259 indicates the variations contained in the index. The standard deviation value in this study is greater than the mean value which means that a big bath accounting variable data varies during the research period.

Profitability measured by the return on equity ratio shows a minimum value of -2.18 and a maximum value of 4.57. The average value of profitability in a firm-year observation is 0.0796 or 7.96%. This means that the average return on equity returns in the sample criteria has a low profitability ratio. The standard deviation of 0.65847 shows the variations contained in profitability. The standard deviation value in this study is greater than the mean value which means that the variable profitability data varies during the research period.

Firm size indicates a minimum value is 6.66 and a maximum value is 10.09. This means that the average mining industry has a very large asset. The deviation unit of 0.65847 shows the variation in firm size. The standard deviation value in this study is smaller than the mean value which means that the variable data of firm size varies less during the research period.

### Results of the General Equation of Logistic Regression

Logistic regression is a regression used to test whether the probability of occurrence of a dependent variable can be predicted with an independent variable. Here's the output of variables in the equation:

**Table 2.**  
**The output of Results Variebles In The Equation**

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>Sig.</b>	<b>Exp(B)</b>
A big bath	1.354	0.490	7.633	0.006	3.872
Profitability	-0.724	0.448	2.609	0.106	0.485
Size	-0.216	0.327	0.434	0.510	0.806
Constant	2.850	2.791	1.042	0.007	17.288

Source: Secondary data processed, 2020

Based on Table 2, it can be seen that a big bath accounting is significant at prob 0.006, profitability is not significant at prob 0.106, firm size is not significant at prob 0.510.

### Discussion

#### The effect of A big bath Accounting on Impairment Losses

Based on the result of hypothesis testing can be found evidence that a big bath accounting has a significant positive effect on the recognition of impairment loss of assets. Companies that doing a big bath accounting recognize an impairment loss because when a company earns a low profit or losses, the company will charge more expenses in the year to lower earnings by recognizing an impairment loss to reduce future expenses so that the financial statements companies in the next period will look better. The results of the study fit the positive accounting theory that managers make bonus plans by choosing accounting policies. Managers may choose to recognize an impairment loss to increase their bonuses in future periods.

Results of this study supported by research conducted by Kirchenheiter and Melumad (2001) which explains that the company performs earnings management in the form of a big bath accounting to recognize the accumulated impairment loss of assets that derived from the low target achieved. Cheng and Warfield's research (2005) is in line with the results of this study which found evidence that decisions on asset impairment are used by managers with high equity incentives to increase the value of their shares. Abrigo and Ferrer prove that impairment is used to earn earnings management by making income smoothing and a big bath accounting (Abrigo and C. Ferrer, 2016).

This study differs from previous research that has been done by (Siggelkow and Zülch, 2013) which explains that managers no longer perform earnings management in the form of a big bath accounting because of management concern over the consequences if they do a big bath accounting. Athanasakou et al. prove that when managers make a big bath accounting it will make the public view the company badly and are required to restate the wrong financial report by the Securities and Exchange Commission (Athanasakou, Strong and Walker, 2010).

### **The Effect of Control Variables on Impairment Losses**

Profitability has an insignificant negative effect on the recognition of impairment losses due to potential investors giving the same response when the state of the company is experiencing a low loss or profit. Low or high profitability does not affect investors in investing in a company. So, managers keep doing impairment of assets even if the company has high or low profitability.

The result of this study was supported by Kirchenheiter and Melumad which resulted in the finding that when the return on equity fell to the lowest or highest point, the company continued to recognize the accumulated impairment loss (Kirschenheiter and Meluma 2002). This study differs from Cheng and Warfield results that decisions on impairment are used by managers with high equity incentives to increase their share value so that the value of the company's stock will tend to be better than the period when the recognition of an impairment loss occurs (Cheng and Warfield, 2005; Cheng, Warfield and Minley, 2011). Laskaridou et al. (2014) prove that the recognition of impairment losses indicates that the company can not satisfy shareholders.

Firm size also has an insignificant negative effect on the recognition of impairment losses. This is consistent with the positive accounting theory of the political cost hypothesis. The greater the political costs faced by the company the greater the tendency of companies to use accounting options that can reduce earnings. Companies tend to admit more to impairment than to reduce their net income and avoid public attention.

The results of this study are supported by Kirchenheiter and Melumad (2001) stating that companies that have large or small sizes continue to recognize the accumulated impairment loss of assets. This is done so that the company can meet expectations expected earnings of the company's owners so that the company will have a stable and satisfactory performance in the eyes of investors. This study differs from Cheng and Warfield's (2005) research results which suggest that large companies will think more about public views regarding recognized impairment losses. Athanasakou et al. (2010) also differ from this study which resulted in the finding that managers no longer perform earnings management in the form of a big bath accounting because management was concerned for the consequences if they do a big bath accounting.

### **B. CONCLUSION, SUGGESTIONS, AND LIMITATIONS**

## **Conclusion**

This study investigates the effect of a big bath accounting on the case of impairment loss of assets in Indonesian mining companies. The research control variable consists of profitability measured by return on equity and firm size measured by total assets.

The results of this study found evidence that companies that tend to do a big bath accounting will recognize a loss of asset value. Managers maximize personal profits by making earnings management in the form of a big bath accounting. A big bath accounting is done because managers assume that investors will give the same response when the company suffered large losses or small losses. The manager acknowledges the costs of future periods and current period losses when unfortunate unavoidable circumstances in the current period. It will consequently make a profit higher than expected in the next year. In the next period, the company's performance will look better so that managers can maximize utility in the form of compensation for the targets that have been achieved.

Companies that have low or high profitability will still recognize an impairment loss. Low or high profitability does not affect investors in investing in a company. Managers continue to impair asset values even if the company has high or low profitability.

Companies that have large or small sizes continue to recognize impairment losses on assets. Companies that have high-profit rates will receive wide attention from consumers and the media which will also attract the attention of government and regulators that lead to political costs, including government intervention, higher taxation, and various other demands that can increase political costs.

## **Limitations**

The limitations of this study are:

1. A big bath is an undisclosed action manager. Formulas designed to detect large baths have not been tested in reality. The results of this study are based on this. The conclusion from the results must be seen in the perspective of a big bath detection instrument.
2. The control variables used in this study are internal firm variables. Future studies need to incorporate external pressures experienced by companies or managers who carry out large baths

## **Suggestions**

Based on the above limitations, suggestions for further research are:

1. Testing the validity of the measuring formula for the occurrence of a big bath.
2. Add or use other control variables such as public stock ownership, market reaction, and debt covenant.

## **References**

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